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Baseline Data

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May15, 2009

Mr. Paul Baker
Division of Natural Resources
Division of Oil, Gas & Mining
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Henry Mountain Gold Mine-Martinique Mining, Garfield County, Utah: Cultural Resources

Mr. Baker

Baseline Data, Inc., has completed a Class I and Class III cultural resource inventory of the Proposed Martinique Mining Henry Mountain Mine Project in Garfield County, Utah.

The inventory recorded site 42GA6319, an Historic Period water diversion ditch and associated ponds. An out-of-period (post 1960s) mine complex, a single out-of-period isolated artifact and out-of-period ore deposit test pits were also noted.

42GA6319 is related to gold mining in the area. The ditches divert water from Crescent Creek and a number of small ephemeral washes that drain a slick rock face and steep slope. The feature is **not** considered to be eligible for nomination to the National Register of Historic Places.

It is the opinion of Baseline that no additional research or mitigation is necessary for this project.

If you have any questions about the findings or recommendations, please do not hesitate to contact us.

Sincerely,

Asa S. Nielson
Principal Investigator
Baseline Data, Inc.

cc. Kenneth L. Wintch-SITLA
Craig Harmon-Richfield District BLM
Lori Hunsaker-SHPO

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RESEARCH REPORT NO. U09-02

A CULTURAL RESOURCE INVENTORY OF THE MARTINIQUE MINING CORPORATION MILL SITE, PLACER ORE DEPOSIT AND SLURRY PIPELINE NEAR CRESCENT CREEK, GARFIELD COUNTY, UTAH

By

Asa Nielson

For

Martinique Mining Corporation
Springville, Utah

BASELINE DATA, INC.
858 South 300 West
OREM, UTAH

Utah State Permit No. 208
Utah State Project Authorization No. U09-BS-0161b,s
Federal Antiquities Permit No. 09UT55138

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May, 2009

Abstract

Baseline Data, Inc., completed a cultural resource inventory of approximately 47 acres of mill site and placer ore deposit, plus about 3000 feet of proposed ore slurry line south of Crescent Creek on the east side of the Henry Mountains in Garfield County, Utah. The project is on land administered by the State Institutional Trust Lands Administration and the Bureau of Land Management. Baseline recorded portions of a water diversion system that dates to 1927 (42GA6319) that is associated with mining. A majority of this ditch complex remains in use. Baseline noted out-of-period mining features and a single isolated artifact dating from the early 1960s and 70s at the proposed Spud Patch Mill Site. Two mineral sampling pits was observed near the proposed slurry line that date to about 1977. The sampling pits are out-of-period. No further research is recommended for this project.

Table of Contents

Abstract i
Table of Contents ii
List of Figures ii
List of Tables ii
Introduction 1
Location 1
Environment 1
Geology 1
Flora 4
Fauna 4
Previous Research 4
Cultural Context 5
Inventory Methods 7
Inventory Results 7
National Register Evaluations 9
Project Recommendations 11
References Cited 12

Appendix 1 Site/IF Location Map (U.S.G.S.)
Appendix 2 IMACS Site forms (Limited Distribution)

List of Figures

Figure 1-General Project Location 2
Figure 2-Project Location (U.S.G.S.) 3

A CULTURAL RESOURCE INVENTORY OF THE MARTINIQUE MINING CORPORATION MILL SITE, PLACER ORE DEPOSIT AND SLURRY PIPELINE NEAR CRESCENT CREEK, GARFIELD COUNTY, UTAH

Introduction

Baseline Data, Inc., has completed a cultural resource inventory of the Martinique Mining Company (hereinafter Martinique) Spud Patch Mill Site location, slurry pipeline and placer ore deposit in Garfield County, Utah (Figure 1).

The cultural resource inventory was conducted by Asa S. Nielson of Baseline Data, Inc. (hereinafter Baseline). The inventory was requested by Mr. Kim Wilson, C.E.O., Martinique. Ground visibility was excellent with the normal constraints of natural vegetation in all locations. The inventory was completed under Utah State Antiquities Permit No. 208, Utah State Project Authorization Number U09-BS-0161b,s and Federal Antiquities Permit No. 09UT55138.

Location

The general area for the inventory is located south of Crescent Creek on the southeast facing slope of Mt. Hillery in the Henry Mountains, Garfield County, Utah (Figure 1). Specifically, the proposed Spud Patch Mill Site location covers approximately 22.9 acres in the NW1/4 SW1/4 NE1/4, the W1/3 NE1/4 SW1/4 NE1/4, the N1/3 SW1/4 SW1/4 NE1/4 and the NW1/4 SE1/4 SW1/4 NE1/4 of Section 32, T.31S R.11E (Figure 2-Raggy Canyon Quadrangle). This location is administered by the State Institutional Trust Land Administration (hereinafter SITLA).

The placer ore deposit covers approximately 24 acres of land located in the N1/2 NW1/4 SW1/4 SE1/4, the N1/2 N1/2 SE1/4 SW1/4, and N1/2 NE1/4 SW1/4 SW1/4, and the NE1/4 NW1/4 SW1/4 SW1/4 of Section 29, T.31S R.11E (Figure 2). This area is administered by the Richfield District Bureau of Land Management (hereinafter BLM).

The proposed ore slurry line extends for about 3000 feet between the placer ore deposit and the proposed mill site. It begins at the ore deposit in the NE1/4 NW1/4 SW1/4 SE1/4 of Section 29 and proceeds southeast to the mill site, ending in the NW1/4 NW1/4 SW1/4 NE1/4 of Section 32. Approximately 1200 feet(2.75 acres) of the pipeline in Section 29 is administered by the BLM and the remainder of the line (4.13 acres) is on land administered by SITLA.

Environment

Geology

The survey area lies in the Henry Mountains which are part of the Henry Mountains Basin of the Colorado Plateau Physiographic Province (Stokes 1986). The survey area consists of

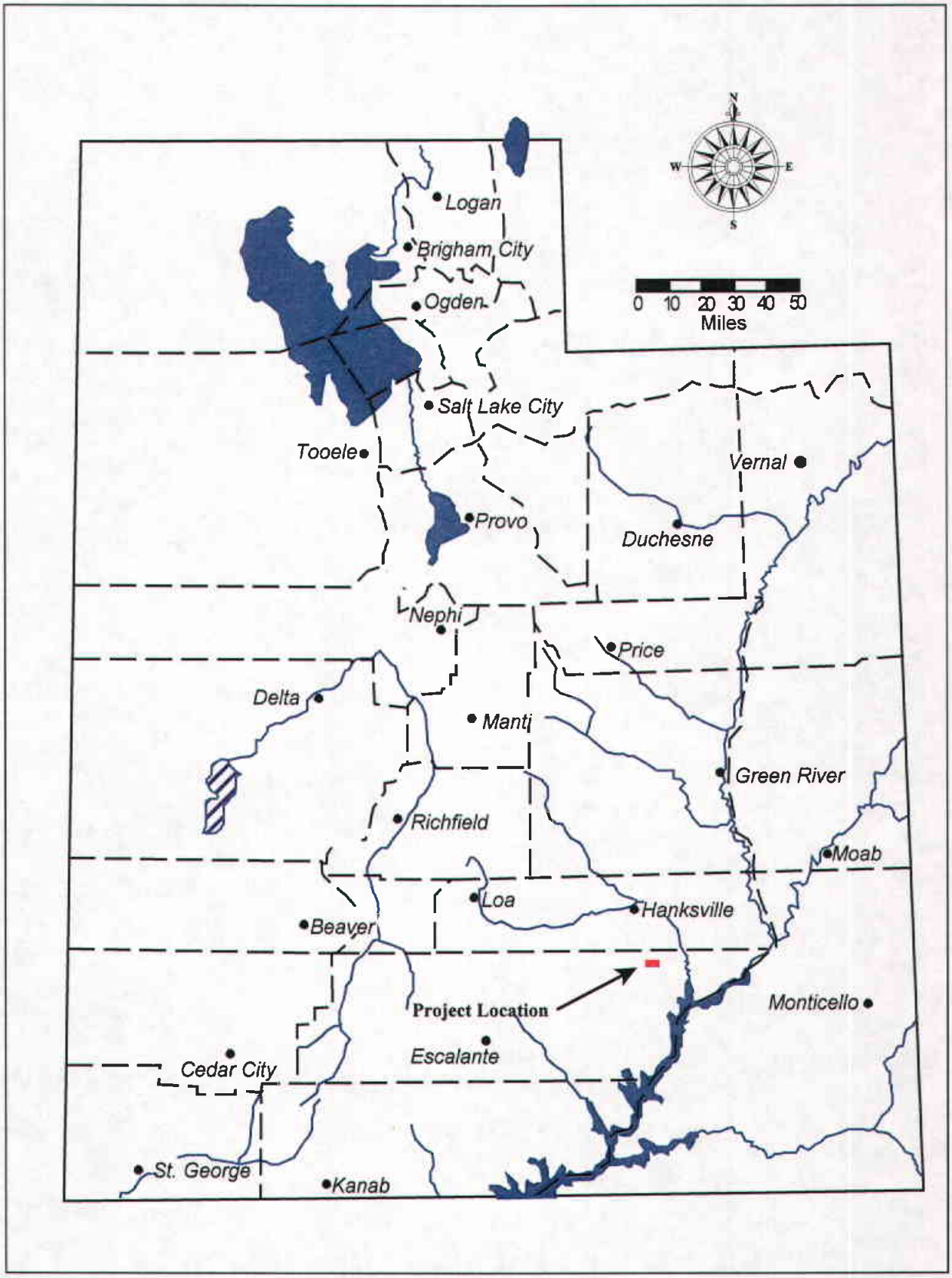

Figure 1. General Project Location

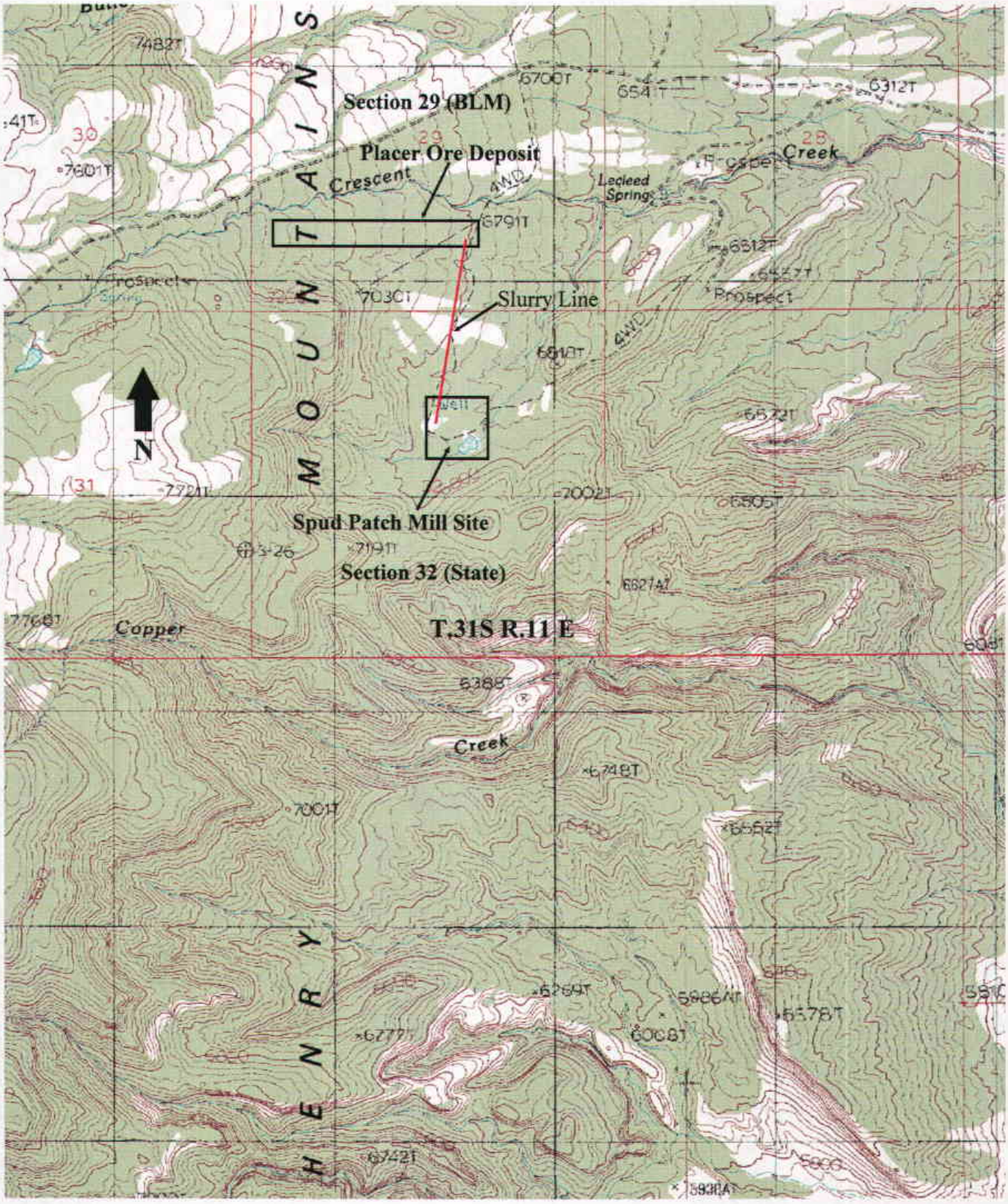

Figure 2. Project Location-Raggy Canyon Quadrangle Utah-Garfield Co., 7.5 Minute Series Topographic

eolian deposits, and deposits of Jurassic epoch Bluff Sandstone, Summerville, Curtis, and Entrada Sandstone (Hintze 1980).

The inventory area is located between Crescent Creek on the north and Cooper Canyon on the south. Both streams drain a portion of the Henry Mountains eastward toward the Burr Desert and the Colorado River.

Flora

The flora of the project area is dominated by two plant communities: sagebrush and pinyon-juniper woodlands. The project area is rich in endemic species (Zeveloff 1988:8). Vegetation along Crescent Creek near the project area consists of pinyon and juniper pine with an understory of sage, occasion squawbrush, bitterbrush and wild grasses. The mill site, placer ore slurry line and placer ore deposit are found in a pinyon-juniper dominated life zone. Nearly 95% of the placer ore deposit surface has been subjected to chaining, which has removed the dominating pinyon and juniper, but even the pinyon-juniper is beginning to re-establish. The predominate vegetation along the slurry line and within the mill site is pinyon and juniper. Small areas have been cleared of the overstory and now exhibit growth of sage and various grasses.

Fauna

The project area is located within the San Rafael Subcenter, Canyon Lands Province, of the Colorado Plateau Faunal Area (Durrant 1952:480). Large mammals known to range in this region include desert bighorn sheep, elk, and mule deer and there is a substantial introduced buffalo herd on the west side of the Henry Mountains. Direct observation of fauna during the inventory was restricted to mule deer, pinyon jay, common crow and chipmunks. Tracks and droppings of coyote were noted throughout the inventory area. No fish species are known to occur in Crescent Creek, the closest permanent water source near the survey area.

Previous Research

Baseline completed a Class I File Search at the State Historical Preservation Office in Salt Lake City. A Class I File Search was completed on behalf of Baseline at the Richfield District BLM office by the BLM Staff Archaeologist. In addition, Baseline has examined historic GLO maps on file at the Utah State Office of the BLM.

A total of four small cultural resource inventories have been conducted within a mile of the proposed project area. The first of these projects was an inventory by the BLM of 12 soil pit sample areas (Dickey 1978). The areas surveyed are in Sections 27-31, T.31S R.11E and in T.31S R.9E Sections 16, 21, and 28. No cultural resources were noted in the report.

The BLM completed an inventory of a fence near a completed chaining project. The fence cuts across the eastern end of the placer ore deposit in Section 29 (Revitte 1984). No sites or isolated artifacts were recorded by the inventory.

The BLM also conducted an inventory for the Gold Queen Placer in T.31S R.11E, Section 28(Lindsay 1990). Again, no cultural resources were noted during the inventory.

Finally, Baseline completed an inventory for MCM Mining LLC., of ore claims and an access road northeast of the inventory area (Eccles 1998). The project recorded three historical sites (42GA 4405, 42GA 4406, and 42GA 4407), as well as 5 isolated artifacts. Sites 42GA 4405 and 42GA 4406 have four structures associated with them. These sites are recommended as being eligible for the National Register but are outside of the current inventory area and will not be impacted by the current project. None of the isolated artifacts were eligible for the National Register.

Cultural Context

People have lived in the region for thousands of years. The current inventory resulted in recording materials from the Historic Period only. The overview of the cultural history will be limited to the Historic Period. Detailed summaries of the prehistory of the eastern Great Basin and Colorado Plateau are available elsewhere (cf. Jennings 1978; Madsen 1982; Madsen and Simms 1998; Simms 2008)

Historic Period

The Historic Period of the region begins with Spanish excursions into the area. As early as the 1540s Spanish soldiers, missionaries, and colonists received reports of a land known as El Gran Teguayo and Lake Copala which now are thought to be the Ute homeland and the Great Salt Lake. There is some speculation that Juan María Antonio Rivera may have entered eastern Utah as early as 1765 (Warner 1978:36; Sánchez 1997:29-39). It is also possible that even earlier expeditions visited southern Utah perhaps as early as the mid seventeenth century although documentation for these journeys is at best scant (Warner 1978:36). The first recorded Spanish expedition into what would eventually become the State of Utah was under the leadership of Franciscan friars Francisco Atanasio Domínguez and Silvestre Vélez de Escalante in 1776 (Weber 1992:254-256). The Spanish friars and other suspected Spanish explorers are not known to have entered the mine project area.

Following the Domínguez - Escalante expedition, interaction with the Ute and Paiute through trade and slave raiding increased with the primary route into the region following the trail established by the Spanish fathers. Throughout the late eighteenth century into the early nineteenth century, several unauthorized and illegal trading expeditions were sent into Utah (Sánchez 1997). Following Mexican independence in 1821, official interest in trade and exploration of Utah was renewed and by 1829 a more direct route was established. This route became known as the Old Spanish Trail and provided access not only to Utah but also served as the route to Southern California. Documented portions of the Spanish Trail are found a considerable distance north and west of the survey area, but none are known to have entered the inventory locale (DeLafosse 1998).

Also during the early nineteenth century, Utah became a major hunting ground for American and Canadian trappers such as Jedediah Smith, William Wolfskill, and Ewing Young (Utley 1997). This in turn was followed by United States government expeditions led by Captain John Frémont, Lieutenant John Gunnison and other Army Topographical Engineers in the 1840s and 1850s (Durham 1997; Goetzmann 1991). These explorations helped encourage the settlement of Utah by Mormon Pioneers in the late1840s but none of these explorers are known to have entered the inventory area (DeLafosse 1998).

Two other trails, one the result of a failed exploration and one used by outlaws, are found east of the inventory area. In 1890, Robert Brewster Stanton, attempted to demonstrate that a railroad could be constructed along the Green and Colorado Rivers. When three of his men drowned in Cataract Canyon, Stanton exited the river near Hite located south of the inventory area. Stanton proceeded back to Green River, passing just east of the inventory area (DeLafosse 1998, Bauman 1994).

The other recognized "trail" is the famous Outlaw Trail. The Outlaw Trail extended from Canada to Mexico (Barton 1994a) and a portion of the trail extended down through the Burr Desert east of the mine inventory area (DeLafosse 1998). Among others, the trail was used by Robert LeRoy Parker (alias Butch Cassidy) and the Wild Bunch during the late 1890s and early 1900's (Barton 1994b). While it is quite possible the outlaws ventured into the mine inventory locale, there is no direct evidence of their activity in the mine area.

Beginning in 1847, a large influx of settlers primarily belonging to the Church of Jesus Christ of Latter-Day Saints began to colonize Utah (Poll et al 1978). The first settlements were established in the Salt Lake Valley, but people rapidly spread throughout Utah during the 1850s and 1860s. Periodic Native American uprisings and the so-called Utah War of 1857 caused temporary retractions of this colonization effort; however, once the violence subsided many former communities were resettled and new ones were established.

Settlement and exploration of the general region waited nearly 22 more years. As a result, the mountain range that would eventually be named the Henry Mountains would remain one of the very last mountain systems to be discovered, named and mapped in the lower 48 States. John Wesley Powell completed his epic voyage down the Green and Colorado rivers in 1869. During that expedition, Powell noted the presence of the mountains but simply referred to them as "the Unknown Mountains" on his maps. Two years later, Powell returned and named the range after Joseph Henry, the Secretary of the Smithsonian Institution and a close friend who helped fund Powell's explorations in the Rocky Mountains (Webb 1994).

Cattlemen ranged livestock in the region as early as the late 1870s, but the first permanent settlement did not occur until 1882 when Ebenezer Hanks and several other families moved into the area and settled Hanksville. The community was named after Ebenezer Hanks (Van Cott 1997). Growth was slow in coming and most of that was concentrated along the upper Fremont River in communities such as Loa and Bicknell. However, because of it's isolation and somewhat

difficult environment, Hanksville grew slowly. Small settlements developed at Hite and Bullfrog on the Colorado, but none of these communities are substantial. In 1892, a large portion of Piute County was separated into Wayne County in which Hanksville now resides.

In 1882, Garfield County was organized from portions of Iron County and was named after President James A. Garfield. Again, because of the isolation of the region, other than Hite and Bullfrog, about the only development that occurred in eastern Garfield County was the result of lifestock grazing and ranching.

In 1890, Jack Sumer, a one-time employee of John W. Powell, discovered a productive vein of gold ore near the summit of Mount Ellen and began mining the precious metal. For a short time, a small community sprang up west of Crescent Creek on Eagle Bench and was called "Eagle City." This community was located about 2-3 km northeast of the present project area. The small community boasted a post office, hotel, saloons, dance hall and stores. Eagle City was short lived however as the gold ore pockets played out and by about 1900, the community was gone. Since that time, sporadic mining of gold, sliver and at various times, uranium and vanadium have occurred in the Henry Mountains (Thompson 1999, Webb 1994).

Inventory Methods

The inventory was carried out by completing compass guided, pedestrian transects spaced approximately 15 m apart in the placer ore and mill site locations. The proposed pipeline was inventoried by completing two parallel transects, one down each side of the pipe center line. Each transect was spaced about 10 m from the center line. Cultural resource sites and isolated artifacts were located and mapped using GPS field survey equipment. Sites were recorded on I.M.A.C.S. Site Forms, were photographed and marked on a U.S.G.S. map. Isolated artifacts were noted on field note sheets, were plotted on the U.S.G.S. map and were also recorded using the GPS equipment. Baseline followed a strict non-collection process, hence, no artifacts were collected from any site or isolated artifact locality. Artifacts were determined to be isolated if fewer than five artifacts were found 50 or more meters from an identified site.

Inventory Results

Baseline recorded one new cultural resource site (42GA6319), two post-1970 gravel test pits, a post-1970 mining area and a single historic isolated artifact. No prehistoric isolated artifacts or sites were observed.

42GA6319 is a water diversion system and retaining ponds related to gold mining. The ditches divert water from Crescent Creek and a number of small ephemeral washes that drain a slick rock face and steep slope. The small washes would eventually drain into Crescent Creek. The longer ditch moves water into the larger of the two retaining ponds. A small branch of the diversion ditch moves water into the smaller or lower retaining pond.

The primary ditch has it's legal diversion point in the NE1/4 SW1/4 NW1/4 SW1/4 of Section 29, T.331S R.11E (Figure A-1Raggy Canyon Quadrangle Utah 7.5 Minute Series). Using a combination of excavated and natural channels, the ditch moves water about 1.3 km (.81 miles) southeast into a retaining pond located in the NW1/4 SW1/4 SW1/4 NE1/4 of Section 32 (Figure A-1). For most of the length of the ditch, the average depth is only about 75 cm, but some cuts are as deep as 3 m. Average width (including bank material) is about 1.5 m. With a single short exception, the ditch is all earthen, cut into the highly permeable gravel that dominates the area. The single noted exception for the channel is a 40 cm (16 inch) diameter steel culvert that is about 3 m (10 feet) in length. It is located in the SE1/4 NE1/4 SE1/4 NW1/4 of Section 32 (Figure A-1).

A short diversion of the longer channel enters a natural drainage the SE1/4 SE1/4 NE1/4 NW1/4 of Section 32. It leaves the natural channel in the NW1/4 NW1/4 SW1/4 NE1/4 of Section 32 and empties into the lower or smaller pond in the SW1/4 NE1/4 SW1/4 NE1/4 of Section 32 (Figure A-1). In all, the diversion is about 285 m in length, averages about 30 cm depth and about 1.5 m width.

Utah Water Right No. 95-240, dated July 11, 1927 lists no specific amount of appropriation on the water right document for the Crescent Creek diversion point. However, Martinique Mining holds 15.6 cubic foot per second (cfs) for their mining operation of which all but .3 cfs is obtained from Crescent Creek (Kim Wilson, CEO-Martinique Mining, personal communication 2009).

The diversion ditches empty into two ponds. The larger or upper pond is in the NW1/4 SW1/4 SW1/4 NE1/4 of Section 32 and is a permanent plotted feature on the U.S.G.S. map (Figure A-1). It covers an area of about .61 ha (1.5 acres). The lower pond is immediately adjacent to the northeast corner of the upper pond and covers an area of about .39 ha (.96 acres). The ponds are cut into the channel of a natural drainage and the down-stream retaining walls are all earthen. There is an older overflow channel that extends about 40 m from the northeast corner of the upper pond to the lower, but a relatively new drainage pipe and control box has been installed between the two ponds. The ponds are a "new" addition to the diversion system, being constructed in the early 1960s (Kim Wilson, personal communication).

The original purpose of the diversion was to provide water for placer mining in what is referred to as "Million Dollar Gulch" (Kim Wilson, personal communication). Million Dollar Gulch is located approximately .7 km down the natural drainage from where the ponds are located. This unnamed (on U.S.G.S. maps) ephemeral wash confluences with Crescent Creek just north of Lecleed Spring (Figure A-1). All unused appropriated water under the assigned water right is returned to Crescent Creek north of Lecleed Spring.

The longer of the diversion ditch channels is maintained on a regular basis and is an active ditch when there is water available. The shorter ditch that diverts water to the lower pond is not maintained and does not appear to have carried water for several decades. It is nearly completely silted over along much of it's length and has been breached by small washes and bank erosion.

Two material test pits were noted along the proposed slurry line. One is located in the C, NW1/4 NW1/4 NE1/4 of Section 32 and the other in the NW1/4 SW1/4 NW1/4 NE1/4 of Section 32 (Figure A-1). The northern-most site is a large pit that is about 10 m long, 5 m wide and about 3 m deep. Material is piled on the east end to a height of about 4 m. Knife opened fruit and juice cans and a ripper blade from a bulldozer are found near this excavation. The southern pit is more of a trench cut into the sides of a small wash. It is about 30 m long and the overburden is placed on the east side of a wash and is about 2 m high. No artifacts were associated with the second pit. There are several more of these pits scattered around the area, but other than the two noted, the rest are outside of the proposed project impact areas. The testing pits are probably the product of mineral testing that occurred during the late 1960s (Kim Wilson, personal communication). They are out-of-period (less than 50 years old) and have not been recorded as cultural resource sites.

During the late 1970s, Pegasus Mining completed a small amount of exploration and placer testing in the Spud Patch Mill location (Kim Wilson, personal communication). Pegasus cut a couple of small access roads on the west side of the proposed Spud Patch Mill Site, cut two platforms, one apparently used to park a trailer/camper, and cleared an area of vegetation just west of the upper pond. Pegasus deposited two 1200 gallon steel tanks and an ore separator bin in the clearing. A small amount of placer processing was completed on the northwest corner of the lower pond, the remains of which are a section of steel siding from a building and a mangled 12 steel pipe section. The Pegasus mining activities have not been recorded as a cultural resource site as it is all out-of-period.

A single isolated artifact (IF-1), a section of auto/truck exhaust tail pipe, was noted near the northern boundary of the Spud Patch Mill Site (Figure A-). It's age could not be determined.

National Register Evaluations

When evaluating the eligibility of sites or properties, Federal Regulation 36 CFR 60.4 states:

> The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, material, workmanship, feeling, and association,
>
> a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b) that are associated with the lives of persons significant in our past; or
>
> c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components

may lack individual distinction; or

d) that have yielded, or may be likely to yield, information important in prehistory or history.

When evaluating the significance of a historic site, integrity plays a major role. Integrity is the ability of a property to convey its significance. To be listed in the National Register a property must not only be shown to be significant under the National Register criteria noted above, but it also must have integrity. Seven factors play an important role in determining the integrity of a site. Historic properties either retain integrity (that is, convey their significance) or they do not. Significance is determined by evaluating the location, design, setting, materials, workmanship, feeling, and association, which are based on the historic context of the area. Three levels of context can be used: local, state, or national. The significance of the site must be evaluated within one of these three levels of historic context.

Location - is the place where the historic resource was constructed or the place where the historic event took place.

Design - is the composition of elements that comprise the form, plan, space, structure, and style of a property.

Setting - is the physical environment of a historic property.

Materials - are the physical elements that were combined or deposited in a particular pattern or configuration to form a district, site, building, structure, or object in a particular period in the past.

Workmanship - is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

Feeling - is the quality a historic resource has in evoking the aesthetic or historic sense of a past period of time.

Association - is the direct link between a property and an event, or person, and so on, for which the property is significant.

Site 42GA6319 is the only site recorded during this inventory. The site is a system of diversion ditches that moves water from Crescent Creek to two retaining ponds that are out-of-period add-ons to the site. While the ditches provide water for mining, a significant element in the history of West, they have had a minimal impact on the local history, little impact on the local or regional economy, environment or settlement patterns. The ditches are associated with no unique engineering features. While they do retain integrity, they provide no significant value to the above listed criteria and have no data recovery potential. Site 42GA6319 is not recommended as being eligible for the National Register of Historic Places.

Project Recommendations

Site 42GA6319 is not eligible for the National Register. None of the other remains are in-period or eligible for the National Register. It is the opinion of Baseline that no further research or mitigation is necessary for this project.

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Appendix 1
(Site/IF Location Map-U.S.G.S.)

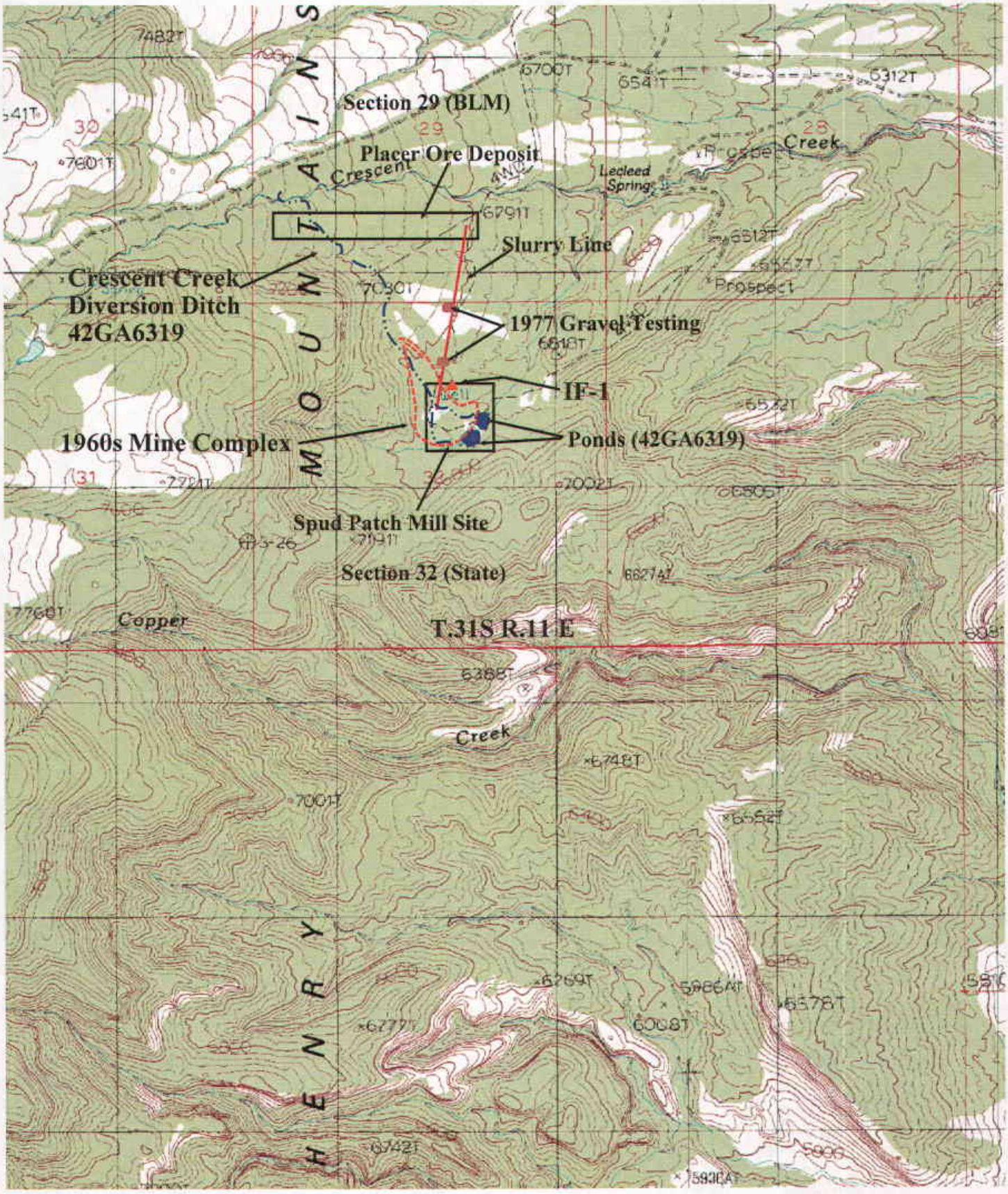
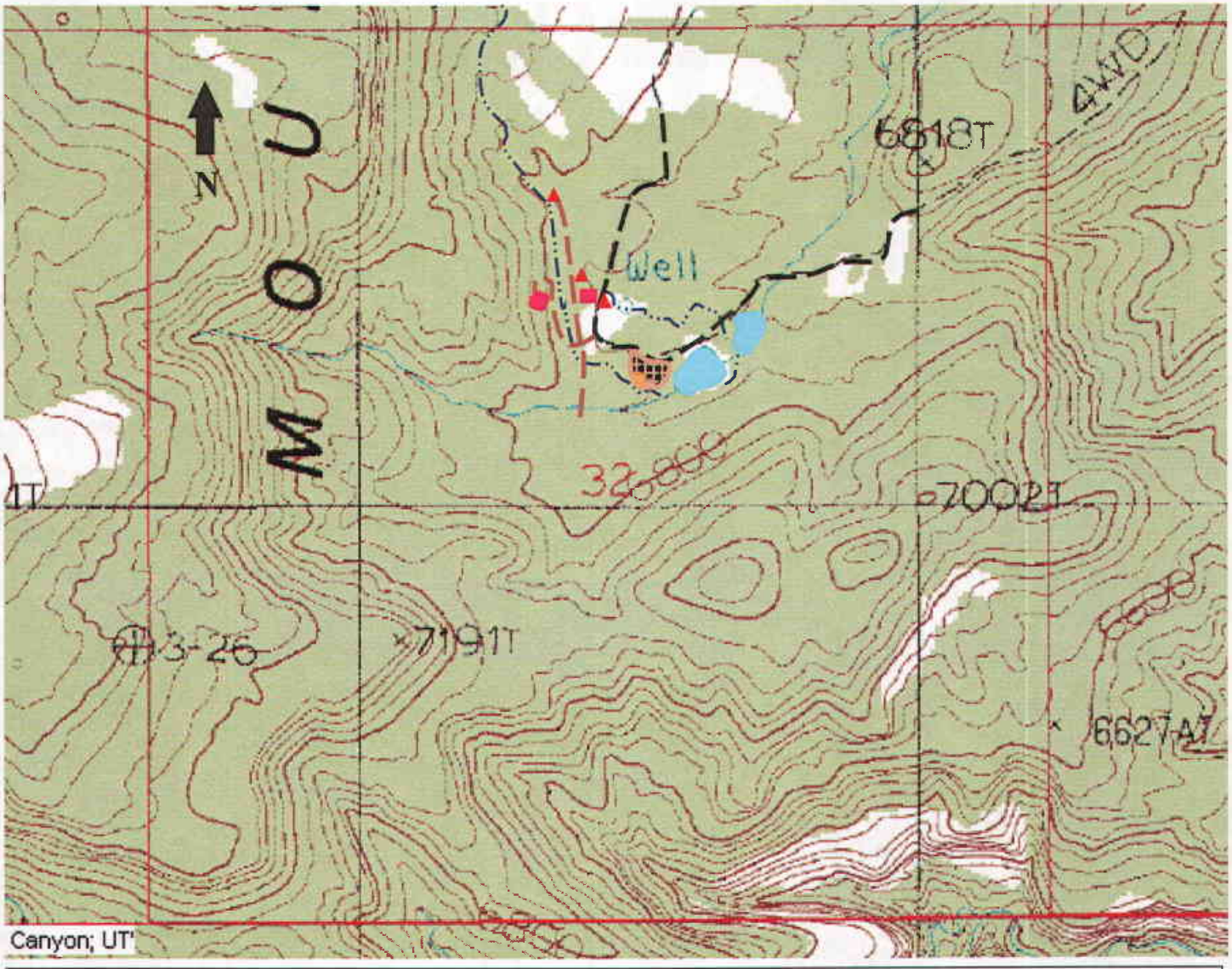


Figure A-1 Site/IF Location-Raggy Canyon Quadrangle Utah-Garfield Co. 7.5 Minute Series Topographic



Spud Patch Mining Site Complex-1960s

- Graded Access Road
- 1960s Access Roads
- Ponds
- Area Cleared of Vegetation
- Diversion Ditches
- Well Heads
- Storage Tanks
- Greaded Platform
- Trailer/Camper Platform

Appendix 2
(IMACS Site Forms-Limited Distribution)

COVER PAGE
Must Accompany All Project Reports
Submitted to Utah SHPO

Project Name: Spud Patch Mill and Slurry Line **State Proj. No.:** U-09-BS-0161bs

Report Date: May 2009 **County(ies):** Garfield

Principal Investigator: Asa S. Nielson

Field Supervisor(s): Asa S. Nielson

Records search completed at what office(s)? USHPO, BLM,

Record search date(s): USHPO, BLM, April 20. 2009

Area Surveyed – Intensive *(≤15 m intervals)*: **53.73 acres** **Recon/Intuitive** *(>15 m intervals)*: _____ **acres**

7.5' Series USGS Map Reference(s): Raggy Canyon Quadrangle 7.5

SITES REPORTED	COUNT / SMITHSONIAN SITE NUMBERS	
Archaeological Sites		
Revisits (no inventory form update)		
Updates (updated IMACS site inventory form attached)		
New recordings (IMACS site inventory form attached)	1	42Ga6319
Total Count of Archaeological Sites	1	
Historic Structures (USHS 106 site info form attached)		
Total National Register Eligible Sites	0	42Ga6319 is not eligible

Checklist of Required Items, attached

1. X Copy of the final report
2. X Copy of 7.5' Series USGS map with surveyed/excavated area clearly identified
3. Completed IMACS site inventory forms
   - X Parts A and B or C
   - X IMACS Encoding Form
   - ___ Site Sketch Map
   - X Photographs
   - X Copy of the appropriate 7.5' Series USGS map with site location marked and Smithsonian site number clearly labeled
4. X Completed "Cover Page" accompanying final report and survey materials

For UDSH office use only

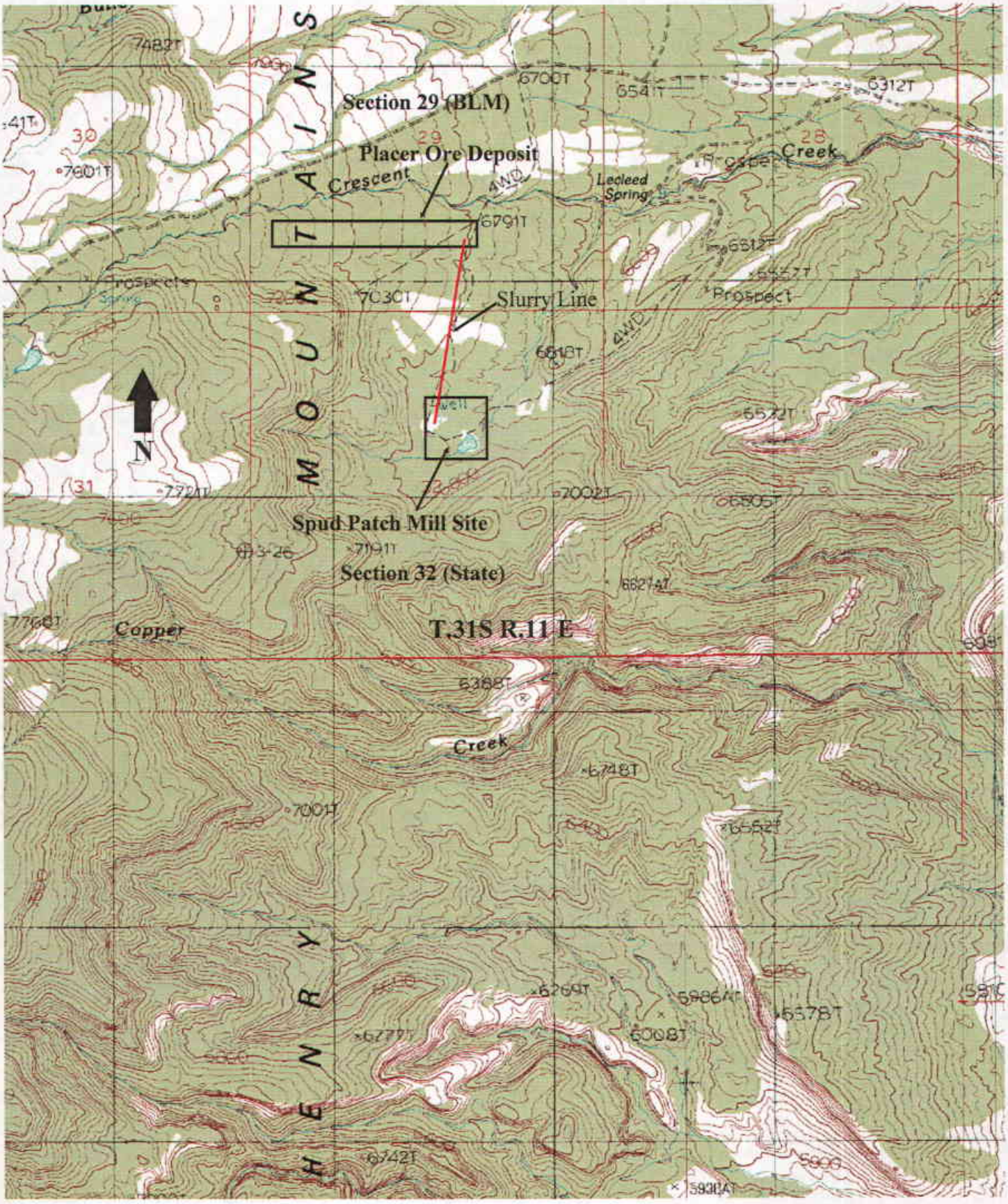


Figure 2. Project Location-Raggy Canyon Quadrangle Utah-Garfield Co., 7.5 Minute Series Topographic

IMACS ENCODING FORM

To be completed for each site form.
For instructions and codes, see IMACS Users Guide.

Encoder's Name: A. Nielson

A

1 [4|2]-[G|A]-[0|0|6|3|1|9] State Site Number

2 [|]-[| | |] Agency Site Number

6 [0|9|B|S|0|1|6|1] Agency Report Number

10 [0|7|1|2|0] Elevation

11

Zone	Easting	Northing
12	523780	4214330
12	524030	4214090
12	524280	4213700
12	524530	4213240
12	524488	4213410
12	524665	4213300

12

1/4	1/4	1/4	Sec.	T.	R.
SW	SW	SW	27	31S	011E
NE	SW	SW	27	31S	011E
SE	NE	NW	32	31S	011E
SW	SW	NE	32	31S	011E
NW	SW	NE	32	31S	011E
NW	SW	NE	32	31S	011E

13 Merid. [1]

14 U.S.G.S Map: Raggy Canyon Quadrangle 7.5

17 Owner [ ]

18 Forest [B|5] Dist./Park [I|9]

19 Loc. Curated Materials [|]

21 Cond. [B]

22 [E|R] Impacts [ ]

23 N.R. [D]

26 Organ. [B|S]

28 Survey Date [05-19-09]

29 Slope [01]

Aspect [120]

30 Water: distance/type [001][B]

31 Geog. Unit [CAQ]

32 Topographic Location: 1st [B] 2nd [A]

33 Dep. [H]

34 Vegetation [D] [HPH] (1 2 3)

35 Misc. Text, Site Name [ ]

B

2 Culture/Dating Method [|]

3 Area [| | | |]

4 Collect [ ]

5 Depth [ ]

6 Excav. Status [ ]

7 Prehistoric Artifacts [|] [|] [|] [|] [|] [|] [|]

8 Lithic Tools: # / type [| |] [| |] [| |]

9 # [ ] Flaking Stages [| | | |]

11 [| |] [| |] Ceramics: # / type [| |] [| |]

13 Features: #/ type [| |] [| |] [| |]

14 Architecture: # / material / type [| | |] [| | |]

C

2 Historic Themes [MN] [ ]

3 Cultures / Dating Method [EAH] [EAI]

4 Dates [1927] [2009]

5 Area [01900]

6 Collect. [A]

7 Depth [C]

8 Excav. Status [C]

9 Artifacts [| |] [| |] [| |]

14 Features: # / type [2OT] [2OT] [| |]

15 Architecture: # / material / type [| | |] [| | |] [| | |] [| | |] [| | |] [| | |]

LETTERING GUIDE A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 1 2 3 4 5 6 7 8 9 0

IMACS Site Form

Part A – Administrative Data

INTERMOUNTAIN ANTIQUITIES COMPUTER SYSTEM
Form approved for use by
BLM - Utah, Idaho, Wyoming
Division of State History-Utah, Wyoming
USFS - Intermountain Region
NPS - Utah, Wyoming

1. **State No:** 42GA6319
2. **Agency No:**
3. **Temp. No.** HMM-1

4. **State:** Utah **County:** Garfield
5. **Project:** Martinique Mining Henry Mountains
6. **Report No:** U-09-BS-0161bs
7. **Site Name / Property Name:**
8. **Class** _ Prehistoric X Historic _ Paleontologic _ Ethnographic
9. **Site Type:** Diversion Ditch and Pond System
10. **Elevation:** 7120 feet
11. **UTM Grid Zone:**

12	523780	m E	4214330 m N
12	524030	m E	4214090 m N
12	524280	m E	4213700 m N
12	524530	m E	4213245 m N
12	524448	m E	4213410 m N
12	524665	m E	4213300 m N

12.

NE	1/4 of SW	1/4	of	SW	1/4	of	SW	1/4	Section	27	Township	31S	Range	11E
SE	1/4 of NE	1/4	of	SW	1/4	of	SW	1/4	Section	27	Township	31S	Range	11E
NW	1/4 of SE	1/4	of	NE	1/4	of	NW	1/4	Section	32	Township	31S	Range	11E
NE	1/4 of SW	1/4	of	SW	1/4	of	NE	1/4	Section	32	Township	31S	Range	11E
NW	1/4 of NW	1/4	of	SW	1/4	of	NE	1/4	Section	32	Township	31S	Range	11E
SE	1/4 of NE	1/4	of	SW	1/4	of	NE	1/4	Section	32	Township	31S	Range	11E

13. **Meridian:** Salt Lake City, Utah
14. **Map Reference:** Raggy Mountain Quadrangle 7.5 Minute Series
15. **Aerial Photo:** N/A
16. **Location and Access:** On Highway-95, proceed south from Hanksville about 24 miles to the Little Egypt road. Travel west and then south for about 5 miles to the junction of the road and the Crescent Creek Road. Follow Crescent Creek Road for about 5 miles to where it crosses over a cattle guard. One the south side of the cattle guard and a fence is the new graded road to the Spud Patch Mill location. Turn left (south)on the road for about .3 miles. After crossing Crescent Creek, the fence angles southeast. Stop here and walk east (phill) about 2500 feet and you will see the diversion ditch carved into the alluvial fan. Continue down the access road to the Spud Patch Mill Site and you will cross the ditch again.
17. **Land Owner:** (ST) State (BL) BLM
18. **Federal Administrative Units:** (19) Henry Mountains
19. **Location of Curated Materials:** N/A
20. **Site Description:** *42GA6319* is a water diversion system and retaining ponds related to gold mining. The ditches divert water from Crescent Creek and a number of small ephemeral washes that drain a slick rock face and steep slope. The small washes would eventually drain into Crescent Creek. The longer ditch moves water into the largest of the two retaining ponds. A small branch of the diversion ditch moves water into the smaller or lower retaining pond.

The primary ditch has it's legal diversion point in the NE1/4 SW1/4 NW1/4 SW1/4 of Section 29, T.31S R.11E (Figure A-1Raggy Canyon Quadrangle Utah 7.5 Minute Series). Using a combination of excavated and natural channels, the ditch moves water about 1.3 km (.81 miles) southeast into a retaining pond located in the NW1/4 SW1/4 SW1/4 NE1/4 of Section 32 (Figure A-1). For most of the length of the ditch, the average depth is

only about 75 cm, but some cuts are as deep as 3 m. Average width (including bank material) is about 1.5 m. With a single short exception, the ditch is all earthen, and is cut into the highly permeable gravel that dominates the area. The single noted exception for the channel is a 40 cm (16 inch) diameter steel culvert that is about 3 m (10 feet) in length. It is located in the SE1/4 NE1/4 SE1/4 NW1/4 of Section 32 (Figure A-1).

A short diversion of the longer channel enters a natural drainage the SE1/4 SE1/4 NE1/4 NW1/4 of Section 32. It leaves the natural channel in the NW1/4 NW1/4 SW1/4 NE1/4 of Section 32 and empties into the lower or smaller pond in the SW1/4 NE1/4 SW1/4 NE1/4 of Section 32 (Figure A-1). In all, the diversion is about 285 m in length, averages about 30 cm depth and about 1.5 m width.

Utah Water Right No. 95-240, dated July 11, 1927 lists no specific amount of appropriation on the water right document for the Crescent Creek diversion point. However, Martinique Mining holds 15.6 cubic foot per second (cfs) for their mining operation of which all but .3 cfs is obtained from Crescent Creek (Kim Wilson, CEO-Martinique Mining, personal communication 2009).

The diversion ditches empty into two ponds. The larger or upper pond is in the NW1/4 SW1/4 SW1/4 NE1/4 of Section 32 and is a permanent plotted feature on the U.S.G.S. map (Figure A-1). It covers an area of about .61 ha (1.5 acres). The lower pond is immediately adjacent to the northeast corner of the upper pond and covers an area of about .39 ha (.96 acres). The ponds are cut into the channel of a natural drainage and the down-stream retaining walls are all earthen. There is an older overflow channel that extends about 40 m from the northeast corner of the upper pond to the lower, but a relatively new drainage pipe and control box has been installed between the two ponds. The ponds are a "new" addition to the diversion system, being constructed in the early 1960s (Kim Wilson, personal communication).

The original purpose of the diversion was to provide water for placer mining in what is referred to as "Million Dollar Gulch" (Kim Wilson, personal communication). Million Dollar Gulch is located approximately .7 km down the natural drainage from where the ponds are located. This unnamed (on USGS maps) ephemeral wash confluences with Crescent Creek just north of Lecleed Spring (Figure A-1). All unused appropriated water under the assigned water right is returned to Crescent Creek north of Lecleed Spring.

The longer of the diversion ditch channels is maintained on a regular basis and is an active ditch when there is water available. The shorter ditch that diverts water to the lower pond is not maintained and does not appear to have carried water for several decades. It is nearly completely silted over along much of it's length and has been breached by small washes and bank erosion.

21. Site Condition: (B) Good

22. Impact Agent(s): (ER) Erosion

The small channel that diverts water to the lower pond appears to have been abandoned for sometime. The channel is nearly filled in and has been breached in some locations. The longer ditch is maintained.

23. National Register Status: (D) Non-Eligible (Professional Judgement)

Justify: The site is a system of diversion ditches that moves water from Crescent Creek to two retaining ponds that are out-of-period add-ons to the site. While the ditches provide water for mining, a significant element in the history of West, they have had a minimal impact on the local history, little impact on the local or regional economy or settlement patterns. The ditches and ponds exhibit no unique engineering features. While they do retain integrity, they provide no significant value to the above listed criteria and have no data recovery potential.

24. Photos: MMH1:1-12b/w

25. Recorded by: Asa S. Nielson

26. Survey Organization: Baseline Data, Inc. **28. Survey Date:** 5/10/09

27. Assisting Crew Members:

List of Attachments:					
		Part B	X	Topo Map	Artifact/Feature Sketch
	X	Part C		Site Sketch	Continuation Sheets
		Part E	X	Photos	Other

Part A – Environmental Data

Site No.(s):42GA6319

29. **Slope:** 1(Degrees) **Aspect:** 120 (Degrees)
30. **Distance to Permanent Water:** 0 x 100 Meters
    Type of Water Source: (B) Stream
    Name of Water Source: Diverted from Crescent Creek
31. **Geographic Unit:** (CAQ) Henry Mountains
32. **Topographic Location:**
    Primary Landform: (B) Hills **Secondary Landform:** (A) Alluvial Fan
    Describe: The site crosses over a broad alluvial fan that has formed on the southeast base of Mt Ellen.

33. **On-site Depositional Context:**(H) Alluvial Plain
    Description of Soil: Most of the area crossed by the water diversion system is cut into alluvial gravel.

34. **Vegetation:**
    a. **Life Zone:**(D) Transitional
    b. **Community:** **Primary On-Site:** (H) Pinyon/juniper
    Secondary On-Site: (P) Big Sagebrush
    Surrounding Site: (H) Pinyon/juniper
    Describe: Most of the diversion system is within a think Pinyon/juniper woodland. There are occasion openings of sagebrush, and some of the p/j has been chained. Sage and small p/j are beginning to re-establish in the chained areas.

35. **Miscellaneous Text:**

36. **Comments/Continuations:** 11/12 cont.

The first two UtM and 1/4 locations are the diversion point of the ditch in Section 27 and the end point in a natural drainage in Section 27. Points 3 and 4 are the beginning and ending points of the maintained ditch is Section 32. Points 5 and 6 are the beginning and ending points of the abandoned ditch is Section 32.

Part C - Historic Sites

Site No.(s): 42GA6319

1. **Site Type:** Ditch and Pond Complex
2. **Historic Theme(s):** (MN) Mining/Mineral Extraction

	Cultural Affiliation	Dating Method
3. **Culture:**	EA EuroAmerican	(H) Informant (I) Historic Record

Describe: Kim Wilson, CEO, mine owner, and Utah Water Right Document

Oldest Date: 1927 **Recent Date:** Present
How Determined?: Water Right Record dates diversion to 1927

5. **Site Dimensions:** 1285 m x 1.5 m **Area:** 1900 sq m

6. **Surface Collection Method:** (A) None
Sampling Method: None

7. **Estimated Depth of Cultural Fill:** (C)
How Estimated: Observation
8. **Excavation Status:** (C)
Testing Method:

9. **Summary of Artifacts and Debris**

Glass	Bone	Leather	Ammunition	Domestic Items
Metal	Ceramics	Wire	Wood	Kitchen Utensils
Nails	Fabric	Tin Cans	Rubber	Car / Car Parts

Describe:

10. Ceramic Artifacts	Paste	Glaze/Slip	Decoration	Pattern	Vessel Form(s)	#

a. Estimated Number of Ceramic Trademarks:
Describe:

11. Glass	#	Manufacture	Color	Function	Trademarks	Decoration

Describe:

12. **Maximum Density - #/sq m (glass and ceramics).:**

13. **Tin Cans:**

Type	Opening	Size	Modified	Label/Mark	Function

Describe:

14. Landscape and Constructed Features:

Trail/Road	Dump	X Dam, Earthen	Hearth/Campfire
Tailings	Depression	X Ditch	Quarry
Rock Alignment	Cemetery/Burial	Inscriptions	Other
Rock Concentration	Cairn	Mine	Prospect Hole
Aspen Art	Railroad Grade	Mine Tailings	Water Trough

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A short diversion of the longer channel enters a natural drainage in Section 32. It leaves the natural channel about 50 m below the diversion from the main ditch and empties into the lower or smaller pond in Section 32 (Figure A-1). In all, the diversion is about 285 m in length, averages about 30 cm depth and about 1.5 m width.

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15. Buildings and Structures:

#	Material	Type	#	Material	Type

Describe:

16. Comments/Continuations:

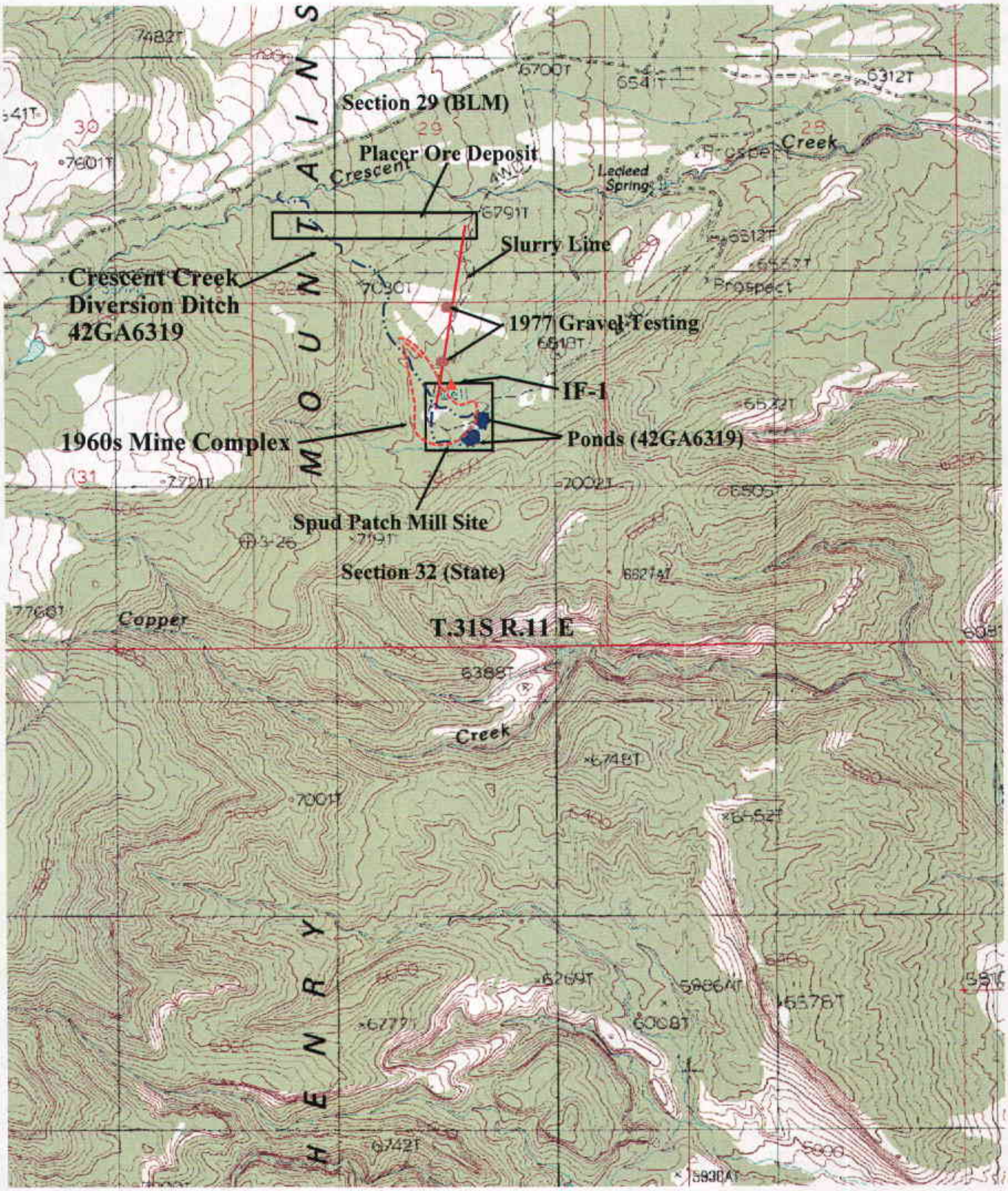
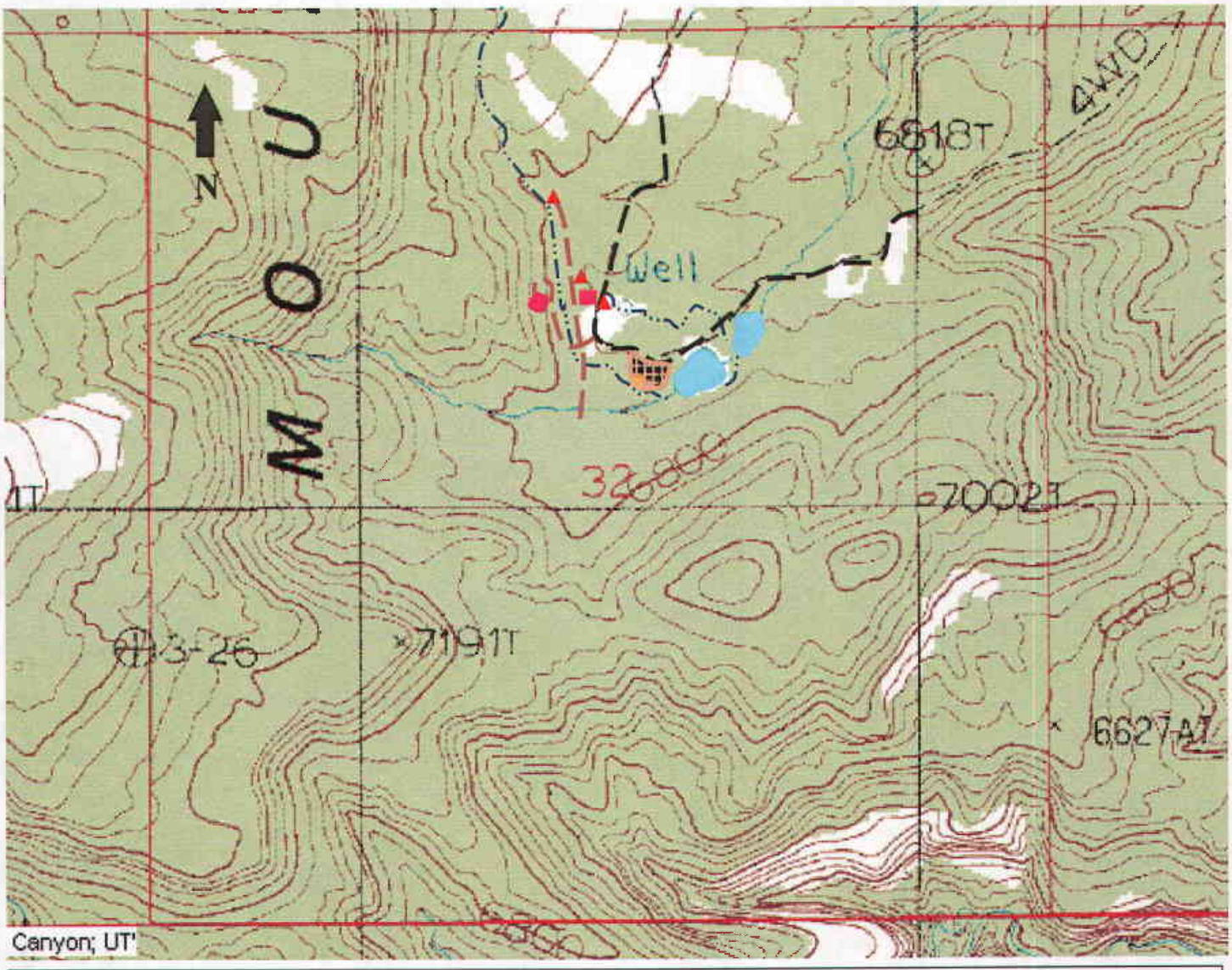


Figure A-1 Site/IF Location-Raggy Canyon Quadrangle Utah-Garfield Co. 7.5 Minute Series Topographic



Spud Patch Mining Site Complex-1960s

- Graded Access Road
- 1960s Access Roads
- Ponds
- Area Cleared of Vegetation
- Diversion Ditches
- Well Heads
- Storage Tanks
- Greaded Platform
- Trailer/Camper Platform

42GA6319 Material borrow for the diversion dam at Crescent Creek, looking northeast. MMH1:1bw

42GA6319 Diversion dam on Crescent Creek, looking west. MMH1:2b/w

42GA6319 Diversion point on Crescent Creek, looking east. MMH1:3b/w

42GA6319 Recently cleared channel in Section 27, looking southeast. MMH1:4b/w

42GA6319 View of ditch line near the upper (east) end of the placer deposit area in Section 27, looking south. MMH1:5b/w

42GA6319 View of a deep ditch cut where the feature enters into and ephemeral wash on the south side of Section 27, looking south. MMH1:6b/w

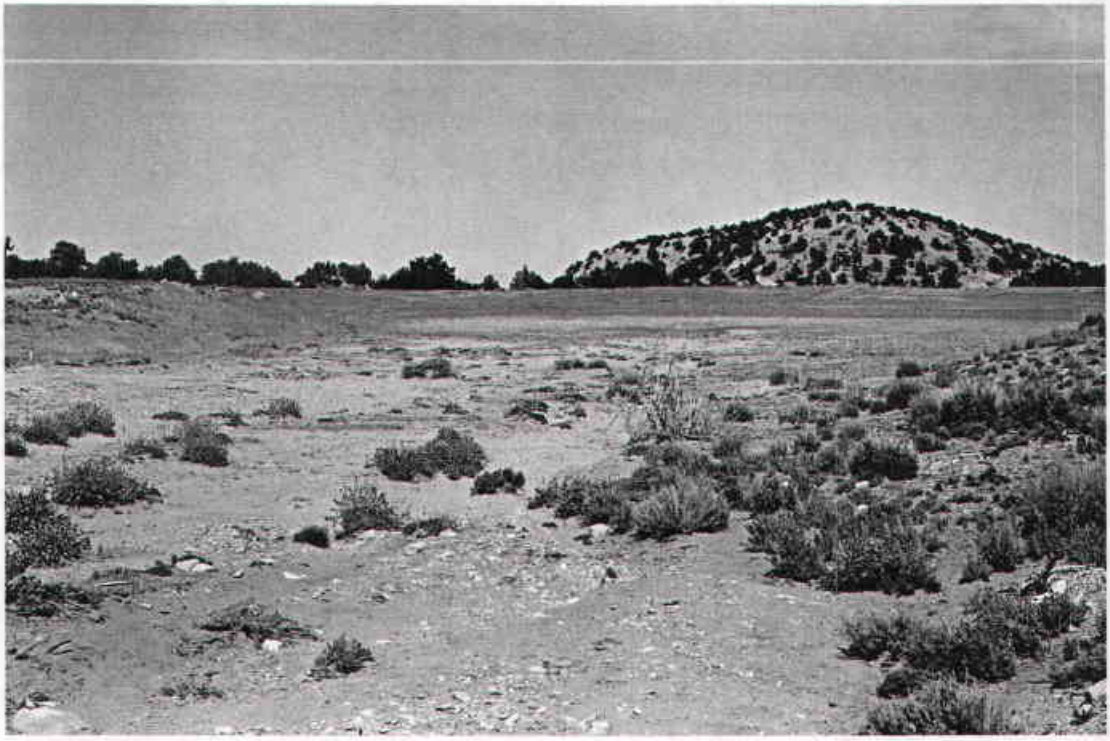
42GA6319 Cleared section of the channel near the upper well in Section 32, looking southeast. MMH1:7b/w

42GA6319 Cleared channel in Section 32, looking northwest. MMH1:8b/w

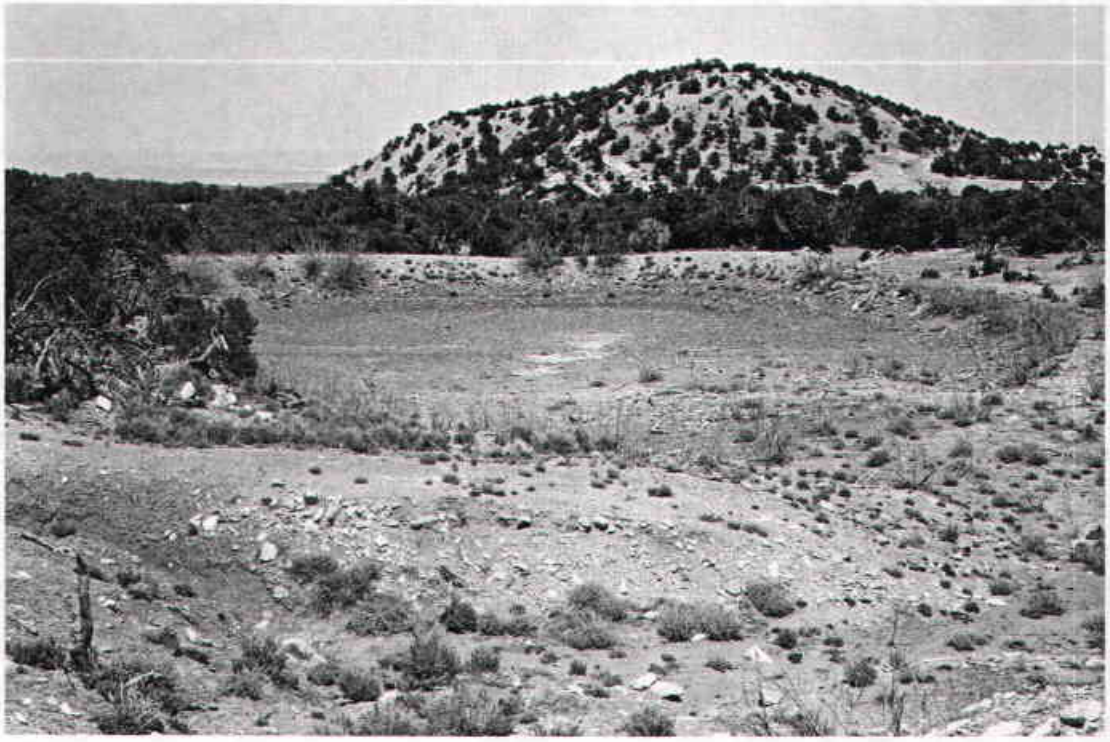
42GA6319 Cleared Section of the channel northeast of the upper well in Section 32. MMH1:9b/w

42GA6319 Steel culvert crossing for an access road in Section 32, looking north. MMH1:10b/w

42GA6319 Diversion of the smaller ditch from a natural drainage in Section 32, looking east. MMH1:11b/w



42GA6319 Upper water pond basin looking northeast. MMH1:12b/w



42GA6319 Lower water pond basin looking northeast. MMH1:13b/w

42GA6319 Abandoned small ditch in Section 32, looking northeast. MMH1:14b/w

42GA6319 New concrete diversion between the upper and lower ponds, looking north.
MMH1:15b/w